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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/563,537	12/29/2005	Duk Hyun Ryu	LEE0046US	8657
23413 7590 01/06/2011 CANTOR COLBURN LLP 20 Church Street 22nd Floor Hartford, CT 06103				
EXAMINER				
HAN, KWANG S				
ART UNIT		PAPER NUMBER		
1727				
NOTIFICATION DATE		DELIVERY MODE		
01/06/2011		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

Office Action Summary

Application No.

10/563,537

Applicant(s)

RYU ET AL.

Examiner

Kwang Han

Art Unit

1727

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

SECONDARY BATTERY WITH AN IMPROVED SAFETY

Examiner: K. Han SN: 10/563,537 Art Unit: 1727 January 3, 2011

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 19, 2010 has been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claim 1-15, are rejected under 35 U.S.C. 102(b) as being anticipated by Chang et al. (US 6387566) is maintained.

Regarding claims 1, 6-11, 14 and 15, Chang discloses a lithium ion battery [Abstract] with a battery package comprised of an aluminum foil (electrically conductive aluminum layer) coated with a thin layer of an insulating polymer on the outer layers (laminate film; 2:24-30) forming an adhesive layer (interface of the aluminum foil and coated insulating layer) electrically insulating the foil packaging from the electrode portion which encloses the outer perimeter of the battery, covers the outer surface of the positive and negative electrodes, and a portion of each of the terminals (37, 38) of

the positive and negative electrodes (Figure 4A, 4B). Chang further discloses connectors (36a, 36b, conductive material) which form an electrical connection between the aluminum layer and the positive and negative electrodes at an exposed region (Figure 4B) where the aluminum layers (41, 44; Figure 4b) which is connected to the positive or negative electrode is electrically insulated from the negative electrode or positive electrode respectively.

Regarding claim 2, Chang discloses the aluminum layer of the battery package and the positive and negative terminals to be connected directly with each other (Figure 4B).

Regarding claims 3, 4, 8, and 9, it is noted that these claims are product-by-process claims. "Even though product-by-process are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." In re Thorpe, 777 F. 2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). The battery structure of Chang is similar to that of the Applicant's, Applicant's method of forming the connections and removing a portion of the layer is not given patentable weight in the claims.

Regarding claim 5, Chang discloses the electrically conductive material to be aluminum (2:30-32).

Regarding claim 12, It is well known to one of ordinary skill in the art that aluminum foil has thermal conductivity. A reference which is silent about a claimed invention's features is inherently anticipatory if the missing feature *is necessarily present in that which is described in the reference*. In re Robertson, 49 USPQ2d 1949 (1999).

Regarding claim 13, Chang discloses a separator (34) interposed between the metal foils (2:11-18).

Response to Arguments

4. Applicant's arguments filed January 19, 2010 have been fully considered but they are not persuasive.

Applicant's principal arguments are:

- (a) The Chang reference teaches the aluminum layer (37, 38) itself serves as battery terminals and not electrically connected to a positive or negative terminal,*
- (b) the aluminum layers of Chang are connected to the positive and negative sheets of the battery through connectors and are not electrically insulated from a negative or positive electrode, and*
- (c) Chang does not disclose any inner adhesive layer.*

In response to Applicant's arguments, please consider the following comments:

- (a) As previously presented in the Advisory Action filed December 22, 2009; the exposed sections of the aluminum layer (37, 38) which serve as the battery terminals

and are electrically connected (continuous conductive layer forming the terminal and aluminum layer) sufficiently meet the limitations of the claims as presented,

(b) the aluminum layers (41, 44; Figure 4b) which is connected to the positive or negative electrode is electrically insulated from the negative electrode or positive electrode respectively,

(c) as presented in the rejection above, the interface of the aluminum foil and coated insulating layer form the inner adhesive layer.

Conclusion

5. This is a request for continued examination. All claims are drawn to the same invention claimed earlier and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier application.

Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case.

See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact/Correspondence Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kwang Han whose telephone number is (571) 270-5264. The examiner can normally be reached on Monday through Friday 8:00am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. H./
Examiner, Art Unit 1727

/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1727